

**Remarks**

Claims 1-20 are pending and have been rejected. Applicant has amended claims 1 and 5 and respectfully submits that claims 1-20 are in condition for allowance.

**Claim Rejections Under 35 U.S.C. § 102(b)**

Claims 1-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Mullin* (U.S. 3,326,827). Applicant respectfully traverses the rejection based on the claim amendment presented above and following arguments.

Independent claim 1 includes, among other things, “pigment particles reacted with an epoxy compound at an elevated temperature in the presence of a solvent for dispersing the pigments.” Similarly, independent claim 5 includes, among other things, that “particles of the pigment are reacted with an epoxy compound at an elevated temperature in the presence of a solvent to provide a surface treatment of the particles.” *Mullin* does not disclose or suggest these features.

As demonstrated by the example preparation process and the advantageous effect attributable thereto in the specification (see Examples 1-6 and Comparative Examples 1-5), with the required heat treatment of the pigment at elevated temperatures, e.g., the reflux temperature of the solvent (e.g., 90 °C), the resultant pigment includes a reaction product with an epoxy compound. The reacted pigments exhibit a lower viscosity value and smaller particle size (see Tables 1 and 2), as well as better thermostability and compatibility (see Table 3). In contrast, *Mullen* merely discloses TiO<sub>2</sub> particles physically coated a plasticizer for dispersing TiO<sub>2</sub>, a pigment, in the polyvinyl resin for the production of a PVC panel. As set forth in the *Mullin* patent, it is intended to have the dispersity of TiO<sub>2</sub>, a good opacifier, in the polyvinyl resin greatly improved so as to manufacture a decorative PVC sheet with excellent quality (see lines 38-41, column 1). For this purpose, rather than blending TiO<sub>2</sub> directly into the polyvinyl resin with a commercially available plasticizer, *Mullin* proposes to physically coat TiO<sub>2</sub> with an epoxidized vegetable oil, e.g., polyepoxide linseed oil, epoxidized soybean oil, (I-b, II-b, see Examples) prior to blending with the polyvinyl resin to capitalize on the embedding function thereof to thereby enhance dispersibility of TiO<sub>2</sub> in the polyvinyl resin. Nowhere in *Mullin patent* is there disclosure or suggestion that the pigment particle is treated with epoxy compound

under an elevated temperature to undergo a reaction between the pigment's surface and epoxidized vegetable oil.

For at least these reasons, Applicant respectfully requests the withdrawal of the rejection of claims 1 and 5, as well as their dependent claims 2-4, 7-8 and 14 respectively, under 35 U.S.C. § 102(b) based on *Mullin*.

Independent method claim 9 includes, among other things, "causing the pigment particles to react with the epoxy compound at an elevated temperature wherein a discrete powder form of the surface treated pigment particles can be obtained by virtue of drying of the solvent." For at least the same reasons stated above, *Mullin* fails to disclose or suggest this feature. Applicant thus respectfully requests the withdrawal of the rejection of claim 9, as well as its dependent claims 10-13 and 15 under 35 U.S.C. § 102(b) based on *Mullin*.

Independent claim 16 includes, among other things, the feature that "the epoxy compound forms a discrete layer on the pigment surface." *Mullin* fails to disclose or suggest this feature. For at least this reason, Applicant respectfully requests the withdrawal of the rejection of claim 16, as well as its dependent claims 17-20 under 35 U.S.C. § 102(b) based on *Mullin*.

Summary

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

**23552**


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Respectfully submitted,

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